# This Page Is Inserted by IFW Operations and is not a part of the Official Record

# **BEST AVAILABLE IMAGES**

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images may include (but are not limited to):

- BLACK BORDERS
- TEXT CUT OFF AT TOP, BOTTOM OR SIDES
- FADED TEXT
- ILLEGIBLE TEXT
- SKEWED/SLANTED IMAGES
- COLORED PHOTOS
- BLACK OR VERY BLACK AND WHITE DARK PHOTOS
- GRAY SCALE DOCUMENTS

## IMAGES ARE BEST AVAILABLE COPY.

As rescanning documents will not correct images, please do not report the images to the Image Problem Mailbox.





### UNITED STATES DEPARTMENT OF COMMER

#### **Patent and Trademark Office**

Address: COMMISSIONER OF PATENTS AND TRADEMARKS

Washington, D.C. 20231

APPLICATION NO. FILING DATE FIRST NAMED INVENTOR ATTORNEY DOCKET NO.

09/094.052

06/09/98

**JONES** 

P 47513

MMC1/0815

PETER F CORLESS DIKE BRONSTEIN ROBERTS & CUSHMAN 120 WATER ST BOSTON MA 02109 EXAMINER

NGUYEN. T

ART UNIT PAF

PAPER NUMBER

2872

DATE MAILED:

08/15/00

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trad marks

## Office Action Summary

Application No. 09/094,052

Applicant(s)

Peter W. J. Jones

Examiner

Thong Q. Nguyen

Group Art Unit 2872

X Responsive to communication(s) filed on Jun 27, 2000	
☐ This action is <b>FINAL</b> .	
☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11; 453 O.G. 213.	
A shortened statutory period for response to this action is so is longer, from the mailing date of this communication. Fails application to become abandoned. (35 U.S.C. § 133). Exte 37 CFR 1.136(a).	
Disposition of Claims	
	is/are pending in the application.
Of the above, claim(s)	is/are withdrawn from consideration.
Claim(s)	is/are allowed.
	is/are rejected.
Claim(s)	
☐ Claims	are subject to restriction or election requirement.
Application Papers	
☐ See the attached Notice of Draftsperson's Patent Draftsperson's	wing Review, PTO-948.
X The drawing(s) filed on Jun 9, 1998 is/are ob	ejected to by the Examiner.
☐ The proposed drawing correction, filed on	is approved disapproved.
$\hfill\Box$ The specification is objected to by the Examiner.	
$oxed{X}$ The oath or declaration is objected to by the Examine	г.
Priority under 35 U.S.C. § 119	
` Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).	
☐ All ☐ Some* ☐ None of the CERTIFIED copie	es of the priority documents have been
☐ received.	
received in Application No. (Series Code/Serial Number)	
$\square$ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).	
*Certified copies not received:	
Acknowledgement is made of a claim for domestic pr	riority under 35 U.S.C. § 119(e).
Attachment(s)	
□ Notice of References Cited, PTO-892	
☐ Information Disclosure Statement(s), PTO-1449, Pape	er No(s)
☐ Interview Summary, PTO-413	2.040
<ul><li>☐ Notice of Draftsperson's Patent Drawing Review, PTC</li><li>☐ Notice of Informal Patent Application, PTO-152</li></ul>	J-240
SEE OFFICE ACTION (	ON THE FOLLOWING PAGES

Art Unit: 2872

#### **DETAILED ACTION**

#### Continued Prosecution Application

The request filed on 06/27/2000 for a Continued Prosecution Application (CPA) under 37 CFR 1.53(d) based on parent Application No. 09/094,052 is acceptable and a CPA has been established. An action on the CPA follows.

#### Oath/Declaration

The objection to the verified Statement Claiming Small entity Status as set forth in the previous Office action (Paper No. 2, page 2) is repeated. It is noted that applicant has not provided a new verified Statement Claiming Small entity Status or provided any explanation to overcome the objection in the Amendments filed on 06/17/1999 and 05/23/2000.

#### Drawings

The objections to the drawings as set forth in the previous Office action (Paper No. 2, page 2, elements 2 and 4) are repeated. In other words, first, the drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the feature concerning the field goggles as recited in claims 4, 5 and 9 must be shown or the feature canceled from the claims; and second, the drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: In particular, the numerical reference "12" as stated in the specification at page 2 (line 24) is not shown in at least one figure.

Art Unit: 2872

It is noted that applicant has not provided any amendment or explanation in the Amendments filed on 06/17/1999 and 05/23/2000 to overcome the objections to the drawings.

#### Claim Rejections - 35 USC § 103

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

1. Claims 1-5, 7 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jones (U.S. Patent No. 4,929,055, of record).

Jones discloses an apparatus for use with an optical device having a light reflecting surface such as a binocular device, a telescope, a periscope, a rifle scope, a night vision device or the like (see column 1). The apparatus comprises a set of concentric circular vanes for the purpose of reducing the reflection of light incident on the lens reflecting surface of the optical device while still maintaining a substantially wide field of view (see column 2, for example). Each of the circular vanes has a first end disposed near the lens reflecting surface, and a second end disposed away from the first end. It is also noted that a combination of concentric circular vanes and radial vanes is disclosed by Jones as can be seen at column 5 and shown in fig. 9. While Jones does not clearly state the apparatus is mounted on a field goggle; however, such a feature is inherent from the Jones' teaching because at column 1 he states that the apparatus can be used by a person of a battlefield troop in a night time in the form of a night vision device. See Jones, columns 1 and 3-4 and figs. 1 and 8-9, for example. Jones also teaches that his optical apparatus has a length-to-width ratio which is equal to or different from the length-to-width ratio of the field of view (see

Art Unit: 2872

columns 2, 3-4, claims 1 and 13, for example). The only feature missing from the Jones reference is that he does not clearly teach that the first ends of the concentric circular vanes are spaced apart from each other at a different distance than the second ends of the concentric circular vanes are spaced apart from each other. However, such an arrangement of the vanes is implied or suggested by Jones himself as can be seen in the embodiment described at column 5 (lines 35-52). In particular, in the embodiment provided at column 5, Jones has suggested that the vanes are arranged in inclined angles with respect to the lens reflecting surface of the optical device. As a result of such an arrangement, the distance between two adjacent first ends of the vanes is different from the distance defined between two adjacent second ends of the vanes. See also figure 10 in which the distance between two adjacent first ends of the vanes is smaller than the distance defined between two adjacent second ends of the vanes. Thus, it would have been obvious to one skilled in the art at the time the invention was made to modify the apparatus having vanes disposed in front of a lens reflecting surface of an optical device as provided by Jones (column 5, lines 10-34) by rearranging the orientation of the vanes so that the distance between two adjacent first ends of the vanes is different from the distance defined between two adjacent second ends of the vanes as suggested by Jones himself for the purpose of reducing the light reflection while still maintaining the wide field of view of the optical device.

2. Claims 6 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jones (U.S. Patent No. 4,929,055, of record).

Page 5

Application/Control Number: 09/094,052

Art Unit: 2872

The apparatus having vanes for use with an optical device for reducing the reflection while still maintaining the wide field of view of the optical device as provided by Jones described above meets all of the limitations of the device as claimed in claims 6 and 11 except the arrangement of the ends of the vane means. In other words, Jones does not state that 1) the first ends of the vane means are arranged further from each other than the second ends of the vane means as recited in the present claim 6 or 2) the first ends of the vane means are spaced apart from each other at a fixed distance, and the second ends of the vane means are spaced apart from each other at a fixed distance as recited in the present claim 11. However, each of such features is merely that of a preferred embodiment and no criticality has been disclosed. The support for this conclusion is found in the present specification in which applicant has admitted that the first ends are arranged so that they are closer to each other than the second ends. It is also noted that the feature concerning the arrangement of the first ends closer to each other than the second ends is indeed claimed as can be seen in the present claim 10. Thus, absent any showing of criticality, it would have been obvious to one skilled in the art at the time the invention was made to modify the arrangement of the ends of the vane means including the arrangement in which the first ends are closer to each other with respect to the second ends or each ends of the vanes are arranged at different fixed distance for the purpose of meeting a particular design while still maintaining the function of reduction reflected light.

Art Unit: 2872

3. Claims 8-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jones (U.S. Patent No. 4,929,055, of record) in view of the prior art described at columns 2-3 and shown in figure 2 of the Patent No. 4,929,055 issued to Jones.

Jones discloses an apparatus for use with an optical device having a light reflecting surface such as a binocular device, a telescope, a periscope, a rifle scope, a night vision device or the like (see column 1). The apparatus comprises a set of concentric circular vanes for the purpose of reducing the reflection of light incident on the lens reflecting surface of the optical device while still maintaining a substantially wide field of view (see column 2, for example). Each of the circular vanes has a first end disposed near the lens reflecting surface, and a second end disposed away from the first end. It is also noted that a combination of concentric circular vanes and radial vanes is disclosed by Jones as can be seen at column 5 and shown in fig. 9. While Jones does not clearly state the apparatus is mounted on a field goggle; however, such a feature is inherent from the Jones' teaching because at column 1 he states that the apparatus can be used by a person of a battlefield troop in a night time in the form of a night vision device. See Jones, columns 1 and 3-4 and figs. 1 and 8-9, for example. Jones also teaches that his optical apparatus has a length-towidth ratio which is equal to or different from the length-to-width ratio of the field of view (see columns 2, 3-4, claims 1 and 13, for example). However, Jones does not clearly teach that the first ends of the concentric circular vanes are spaced apart from each other at a different distance than the second ends of the concentric circular vanes are spaced apart from each other. It is also noted that while Jones states that the length-to-width ratio of the optical device is different from

Art Unit: 2872

that of the field of view, he does not clearly state that the length-to-width ratio of the vanes is greater than that of the field of view.

With regard to the arrangement of the vanes so that distance between the two adjacent first ends of the vanes is different from the distance defined between two adjacent second ends of the vanes, such an arrangement of the vanes is implied or suggested by Jones himself as can be seen in the embodiment described at column 5 (lines 35-52). In particular, in the embodiment provided at column 5, Jones has suggested that the vanes are arranged in inclined angles with respect to the lens reflecting surface of the optical device. As a result of such an arrangement, the distance between two adjacent first ends of the vanes is different from the distance defined between two adjacent second ends of the vanes. See also figure 10 in which the distance between two adjacent first ends of the vanes is smaller than the distance defined between two adjacent second ends of the vanes. Thus, it would have been obvious to one skilled in the art at the time the invention was made to modify the apparatus having vanes disposed in front of a lens reflecting surface of an optical device as provided by Jones (column 5, lines 10-34) by rearranging the orientation of the vanes so that the distance between two adjacent first ends of the vanes is different from the distance defined between two adjacent second ends of the vanes as suggested by Jones himself for the purpose of reducing the light reflection while still maintaining the wide field of view of the optical device.

With regard to the feature concerning the comparison between the length-to-width ratio of the vanes and the length-to-width ratio of the field of view, while Jones has stated that the ratio of Art Unit: 2872

the length-to-width of the vanes is different from that of the field of view (see claim 13, for example), he does not clearly state that the ratio of the length-to-ratio of the vanes is greater than that of the field of view. However, the use of vanes in front of a lens reflecting surface of an optical device wherein the ratio of the length-to-width of is greater than that of a field of view is clearly known to one skilled in the art as can be seen in the optical device disclosed at columns 2-3 and shown in figure 2 of the Patent issued to Jones. It is noted that the arrangement of the vanes so that the distance defined by the ends proximately located to the lens reflecting surface of an optical device is different from the ends located away from the lens reflecting surface of the optical device is the important feature for the purpose of maintaining the field of view for the optical device while satisfying the function of reduction light reflection. Since, such an arrangement is suggested to one skilled in the art as can be seen in Jones, and the use of vanes having a ratio of length-to-width greater than that of the field of view is disclosed in the prior art (Jones patent, columns 2-3 and fig. 2); therefore, it would have been obvious to one skilled in the art at the time the invention was made to modify the combined product as provided by Jones by making the vanes sufficient long as disclosed by the mentioned prior art for the purpose of increasing the ability of reduction light reflection while still maintaining the field of view for the combined product.

#### Response to Arguments

Applicant's arguments with respect to claims 1-10, now applied to claims 1-11, have been considered but are most in view of the new ground(s) of rejection.

Art Unit: 2872

#### Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Exam. Nguyen whose telephone number is (703) 308-4814. The fax phone number for the organization where this application or proceeding is assigned is (703) 308-7722 (or 7724).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

Nguyen

08/10/00

Thong Nguyen
Primery Examiner